

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 23

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte MARK RASPER and TIM RULSEH

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Appeal No. 2002-0986  
Application No. 09/222,282

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ON BRIEF

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Before FRANKFORT, NASE and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's rejection of claim 1. Claim 2, the only other claim pending in this application, stands withdrawn from consideration as being directed to a non-elected invention.

We REVERSE.

BACKGROUND

The appellants' invention relates to a cutting apparatus comprising a non-rotating circular knife provided with an indexing device for automatically indexing the knife to

present a fresh cutting edge to the work being cut (specification, page 1). Claim 1, the sole claim before us on appeal, is reproduced, infra, in the opinion section of this decision.

The examiner relied upon the following prior art references in rejecting the appealed claim:

Bailey	5,761,976	Jun. 9, 1998 (filed Apr. 15, 1997)
Kanbar	5,904,283	May 18, 1999 (filed May 10, 1996)

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bailey in view of Kanbar.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the rejection mailed March 26, 2001 and the answer (Paper Nos. 15 and 20) for the examiner's complete reasoning in support of the rejection and to the supplemental brief<sup>1</sup> and reply brief (Paper Nos. 17 and 21) for appellants' arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claim 1, to the applied Bailey and Kanbar patents, and

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<sup>1</sup> Appellants filed a supplemental brief in response to the examiner's new rejection (Paper No. 15) following appellants' first appeal brief (Paper No. 14).

to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Claim 1 reads as follows<sup>2</sup>:

1. An indexing means for a non-rotating circular core cutting knife comprising;
  - a) a circular knife defining a central orifice and a positional index adjacent to the central orifice,
  - b) a knife mounting mandrel sized to pass through and closely fit the central orifice,
  - c) an [sic, a] positional index engaging means secured to the mandrel,
  - d) a means for securing the knife in place on the mandrel,
  - e) a worm gear secured to the mandrel,
  - f) a worm shaft having as a part thereof a worm and the worm is operably engaged with the worm gear,
  - g) an overrunning coupling operably secured to the worm shaft so that the coupling in an engaged portion of a cycle rotates the knife in the direction of rotation of a core being cut.<sup>[3]</sup>

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<sup>2</sup> We note that the preamble of the claim is not commensurate in scope with the body of the claim, in that the preamble is directed to an indexing means for a cutting knife while the body of the claim actually recites both a circular knife and an indexing means for the knife. Additionally, the claim is replete with “means” recitations and it is not apparent to us what structure disclosed in appellants’ specification corresponds to these “means.” Merely by way of example, it is not clear to us what two structures correspond to the recited “means” in paragraphs c) and d) of claim 1. While one of these “means” could correspond to the keyway shown in Figure 4, we find no other structure which appears to correspond to the other of these two “means.” We observe that, if one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112. In re Dossel, 115 F.3d 942, 946, 42 USPQ2d 1881, 1885 (Fed. Cir. 1997). With this in mind, the examiner may wish to review claim 1 to determine what disclosed structure corresponds to each of appellants’ “means” recitations in claim 1 to ensure compliance with the second paragraph of 35 U.S.C. § 112.

<sup>3</sup> This period should apparently be a comma.

h) a means for counting cutting cycles of the knife and a means for counting indexing cycles of the indexing means,

i) a means for activating the knife indexing means when a preset number of cutting cycles has been completed and a means for terminating cutting operations when a predetermined number of indexing cycles has been completed and a predetermined number of cutting cycles has been completed.

Bailey, the jumping off point of the examiner's obviousness rejection, discloses a knife assembly comprising upper and lower mandrels 12, 13 on which cardboard cylinders 15, 16 are rotated and a pair of stationary circular knives 47 for cutting the cylinders. Each knife is mounted on a shaft 44 provided at one end with a one-way clutch 51. A spring returned air cylinder 81 having a rod 82 extending therefrom is pivotally mounted to an arm 54 operatively connected to the one-way clutch. Movement of the arm 54 by actuation of the cylinder rotates the shaft and moves the cutting surface of the knife. Upon the spring return of the cylinder, the arm is then returned in an opposite direction, the knife remaining stationary, by virtue of the one-way clutch, during the return. In an alternate embodiment, the arm 54 is moved manually to index the knife. A programmable logic control for actuating the cylinder after a predetermined number of cuts is described in the last paragraph of column 3.

The examiner concedes that Bailey lacks a worm gear and worm shaft as recited in claim 1. To overcome this deficiency, the examiner relies on the teachings of Kanbar of a note paper sheet dispenser provided with a drive gear 22 mounted to a shaft for

driving a dispensing roller 17 and a worm gear 23 mounted to the armature shaft of a dc-motor 24. To actuate the dispenser, the user presses a button to close a switch 25 to operate the motor 24 to rotate the drive roller 17, the length of paper sheet dispensed depending on the duration of the period during which the switch 25 is kept in the closed state. According to the examiner, it would have been obvious to one of ordinary skill in the art to provide the Bailey apparatus with a worm gear and worm shaft to eliminate the need to manually drive the shaft 44 of Bailey which indexes the circular knife because it is well known in the art to provide a worm gear and worm shaft mechanism to generate rotary motion.

Appellants argue on page 3 of their supplemental brief, inter alia, that (1) the contents of a patent application pending at the time an invention is made are not available as prior art for 35 U.S.C. § 103 purposes and, similarly, that the contents of an issued patent are not available for the purpose of the making of a 35 U.S.C. § 103 rejection as of the filing date of the patent application from which the patent issued and (2) Kanbar provides no “direction and motivation” to provide a worm and worm gear “for the purposes that they are employed in the instant invention to achieve the ends achieved by this invention.”

Appellants’ first argument is apparently directed to the fact that both the Bailey and Kanbar patents issued from applications which were filed prior to the effective filing date of the instant application (January 5, 1998, the filing date of the provisional

application 60/070,405 of which the instant application claims benefit under 35 U.S.C. § 119(e)) but did not issue until after the effective filing date of the instant application. Consequently, it is appellants' position that these patents are not available as prior art against the claims of this application for obviousness considerations under 35 U.S.C. § 103. This issue, however, has already been addressed and expressly rejected by the United States Supreme Court. See Hazeltine Research, Inc. v. Brenner, 382 U.S. 252, 253-56, 147 USPQ 429, 430-31 (1965), rehearing denied, 382 U.S. 1000 (1966) (patent which issued from earlier-filed application of "another" constitutes part of "prior art" as that term is used in 35 U.S.C. § 103 and as such is available for consideration in a 35 U.S.C. § 103 "obviousness" rejection, notwithstanding that it did not issue until after the filing date of the later-filed application). Even assuming that the instant application is entitled to the benefit of the provisional application, both Bailey and Kanbar are available as prior art in considering the issue of obviousness of the subject matter of claim 1 of this application.

Appellants' second argument, that the applied patents provide no teaching or suggestion to modify Bailey to arrive at the invention recited in claim 1, on the other hand, is well taken. In particular, while a worm gear and rotary motor arrangement of the type taught by Kanbar could be used to rotate, and thus index, the knives 47 of Bailey, we find no suggestion in either Kanbar or Bailey to do so. The mere fact that the prior art could be so modified would not have made the modification obvious unless

the prior art suggested the desirability of the modification. See In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); In re Mills, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). As stated in In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000),

[m]ost if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant [citations omitted].

From our perspective, Kanbar's use of a drive gear and worm gear arrangement in a sheet dispenser for driving a dispensing roller offers no suggestion to replace the manual or the linear to rotary actuator arrangement in Bailey's cutting apparatus. Moreover, even if such a modification were made, it is not apparent to us, absent appellants' teaching, why one skilled in the art making such a modification would necessarily combine such a worm gear device with an overrunning coupling operably secured to the worm shaft as called for in claim 1. Bailey's one-way clutch 51 is provided for use with the arm 54 and the manual or reciprocating cylinder arrangement to prevent backward rotation of the knife upon return motion of the arm. Such reciprocation would not appear to be an issue with the use of a rotary dc-motor and

worm gear arrangement as taught by Kanbar. Even if a one-way clutch were used with such an arrangement, the motivation to operably secure such a clutch to the worm shaft as called for in claim 1 rather than, for example, coupled directly to the motor would appear to stem merely from hindsight accorded one who first viewed the appellants' disclosure. This, of course, is not a proper basis for a rejection. See In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

For the foregoing reasons, we conclude that the teachings of Bailey and Kanbar are insufficient to have suggested the subject matter of claim 1 so as to establish a prima facie case of obviousness. Therefore, we shall not sustain the examiner's rejection.

#### CONCLUSION



To summarize, the decision of the examiner to reject claim 1 under 35 U.S.C.  
§ 103(a) is reversed.

REVERSED

CHARLES E. FRANKFORT  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

JENNIFER D. BAHR  
Administrative Patent Judge

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